ABSTRACT OF THE DISCLOSURE

A process for preparing organopolysiloxane compositions (A) having a viscosity measured at 25°C of at least 500 Pa·s., wherein organopolysiloxanes (O) and fillers (F) are mixed and kneaded in a first process stage in a kneading cascade having at least two kneading chambers arranged in series adjacent one another, each containing kneading tools having parallel axes and capable of being driven in co-rotating or counter-rotating directions, the chambers connected to one another by means of openings through which material can pass in a direction transverse to the axes of the kneading tools, with the first kneading chamber having a feed opening and the last kneading chamber having a discharge opening, to give raw mixtures, and the raw mixtures are kneaded and degassed in a reciprocating kneader in a second process stage.